

CLAIMS

What is claimed is:

1. A method, comprising:

receiving, at a terminal device, one or more scattering instructions, the scattering instructions providing information for temporally scattering at least one portion of a plurality of time slot data, the temporal scattering dividing the at least one portion of time slot data into at least two temporally non-contiguous time intervals; and

transmitting the temporally scattered data.

2. The method of Claim 1, further comprising receiving configuration information, wherein the one or more scattering instructions are included with the configuration information.

3. The method of Claim 1, wherein the one or more scattering instructions comprise an index into a memory of stored time-scattering control information.

4. The method of Claim 3, wherein the memory is disposed within the terminal device.

5. The method of Claim 1, wherein the one or more scattering instructions comprise a tabular indication of how to temporally scatter the data.

6. The method of Claim 5, wherein the tabular indication specifies, by time interval identifier, a starting location for scattered data.

7. The method of Claim 1, wherein the one or more scattering instructions comprise an algorithm for temporally scattering the data.

8. A terminal device, comprising:
 - a processor;
 - a memory of stored time-scattering control information coupled to the processor; and
 - a machine accessible medium, coupled to the processor, having instructions encoded therein, the instructions, when executed by the processor, cause the terminal device to:
 - receive one or more scattering instructions, the scattering instructions providing information for temporally scattering at least one portion of a plurality of time slot data, the temporal scattering dividing the at least one portion of time slot data into at least two temporally non-contiguous time intervals; and
 - transmitting the temporally scattered data.

9. The terminal device of Claim 8, wherein the instructions, when executed by the processor further cause the terminal device to receive configuration information, wherein the one or more scattering instructions are included with the configuration information.

10. The terminal device of Claim 8, wherein the one or more scattering instructions comprise an index into the memory.

11. The terminal device of Claim 10, wherein the memory is part of the terminal device.

12. The terminal device of Claim 8, wherein the one or more scattering instructions sequentially scatter time slot data into at least two non adjacent time intervals.

13. The terminal device of Claim 8, wherein the one or more scattering instructions comprise a tabular indication of how to temporally scatter time slot data.

14. The terminal device of Claim 8, wherein the one or more scattering instructions comprise an algorithmic indication of how to temporally scatter time slot data.

15. A method comprising:

receiving a request from a terminal device for access to a communications channel;

generating a schedule of transmission for the terminal device, the schedule dividing the terminal device's transmissions of time slot data into at least two temporally non-contiguous time intervals; and

transmitting the schedule of transmission to the terminal device.

16. The method of Claim 15, wherein receiving the request comprises receiving an indication of the amount of data queued at the terminal device for communication.

17. The method of Claim 15, wherein the schedule of transmission comprises a list of time intervals.

18. The method of Claim 17, wherein each time interval comprises a starting location in a frame and a transmission duration.

19. The method of Claim 15, further comprising transmitting modulation control information for the time scattered data.

20. The method of Claim 18, wherein the communications channel is divided into frames and wherein each frame is divided into a number of time slots in accordance with a dividing rate.

21. The method of Claim 18, wherein the starting location comprises a time slot and the transmission duration comprises a number of time intervals.

22. The method of Claim 18, wherein the starting location comprises a first time interval identifier and the transmission duration comprises a second time interval identifier.

23. The method of Claim 15, further comprising receiving data from the terminal device, transmitted in a scattered manner per the scattering instructions, and reordering the

data in accordance with the scattering schedule to obtain the data in its originally intended order.

24. A method of communicating, comprising:
providing a de-scattering schedule to a plurality of terminal devices; and
transmitting a plurality of time-scattered data to the plurality of terminal devices.

25. The method of Claim 24, further comprising receiving at least a portion of the plurality of time-scattered data at a first one of the plurality of terminal devices, and reordering the received portion of time-scattered data.

26. Apparatus comprising:
means for receiving a request from a terminal device for access to a communications channel;
means for generating a schedule of transmission for the terminal device, the schedule dividing the terminal device's transmissions of time slot data into at least two temporally non-contiguous time intervals; and
means for transmitting the schedule of transmission to the terminal device.

27. The apparatus of Claim 26, wherein receiving the request comprises receiving an indication of the amount of data queued at the terminal device for communication.

28. The apparatus of Claim 26, wherein the schedule of transmission comprises a list of time intervals.

29. The apparatus of Claim 28, wherein each time interval comprises a starting location in a frame and a transmission duration.

30. The apparatus of Claim 26, further comprising transmitting modulation control information for the time scattered data.

31. The apparatus of Claim 26, wherein the communications channel is divided into frames and wherein each frame is divided into a number of time slots in accordance with a dividing rate.

32. The method of Claim 26, further comprising means for receiving data from the terminal device, transmitted in a scattered manner per the scattering instructions, and means for reordering the data in accordance with the scattering schedule to obtain the data in its originally intended order.

33. Apparatus for communicating, comprising:
means for providing a de-scattering schedule to a plurality of terminal devices; and
means for transmitting a plurality of time-scattered data to the plurality of terminal devices.

34. The method of Claim 33, further comprising means for receiving at least a portion of the plurality of time-scattered data at a first one of the plurality of terminal devices, and means for reordering the received portion of time-scattered data.

35. Apparatus, comprising:
means for receiving, at a terminal device, one or more scattering instructions, the scattering instructions providing information for temporally scattering at least one portion of a plurality of time slot data, the temporal scattering dividing the at least one portion of time slot data into at least two temporally non-contiguous time intervals; and
transmitting the temporally scattered data.

36. The apparatus of Claim 35, further comprising means for receiving configuration information, wherein the one or more scattering instructions are included with the configuration information.

37. The apparatus of Claim 35, wherein the one or more scattering instructions comprise an index into a memory of stored time-scattering control information.

38. The apparatus of Claim 35, wherein memory is disposed within the terminal device.